



## Complete Summary

### TITLE

Hysterectomy: risk-adjusted rate of unplanned readmission following discharge for hysterectomy.

### SOURCE(S)

Canadian Institute for Health Information (CIHI). Health indicators 2008: definitions, data sources and rationale. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2008 May. 39 p.

## Measure Domain

### PRIMARY MEASURE DOMAIN

Outcome

The validity of measures depends on how they are built. By examining the key building blocks of a measure, you can assess its validity for your purpose. For more information, visit the [Measure Validity](#) page.

### SECONDARY MEASURE DOMAIN

Does not apply to this measure

## Brief Abstract

### DESCRIPTION

This measure is used to assess the risk-adjusted rate of unplanned readmission following discharge for hysterectomy.

### RATIONALE

Readmission rates provide one measure of the quality of care. Although readmission following surgery may involve factors outside the direct control of the hospital, high rates of readmission act as a signal to hospitals to look more carefully at their practices, including the risk of discharging patients too early and the relationship with community physicians and community-based care.

### PRIMARY CLINICAL COMPONENT

Hysterectomy; readmission rate

## **DENOMINATOR DESCRIPTION**

Total number of hysterectomy episodes in an 11-month period

Refer to the "Technical Note: Hysterectomy Readmission" document listed in the "Companion Documents" field, which describes the episode building and case selection.

## **NUMERATOR DESCRIPTION**

Number of hysterectomy episodes with a readmission for a given year (see the related "Numerator Inclusions/Exclusions" field in the Complete Summary)

### **Evidence Supporting the Measure**

#### **EVIDENCE SUPPORTING THE CRITERION OF QUALITY**

- A formal consensus procedure involving experts in relevant clinical, methodological, and organizational sciences
- One or more research studies published in a National Library of Medicine (NLM) indexed, peer-reviewed journal

### **Evidence Supporting Need for the Measure**

#### **NEED FOR THE MEASURE**

Use of this measure to improve performance  
Variation in quality for the performance measured

#### **EVIDENCE SUPPORTING NEED FOR THE MEASURE**

Canadian Institute for Health Information (CIHI). Health indicators 2008. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2008. 96 p.

### **State of Use of the Measure**

#### **STATE OF USE**

Current routine use

#### **CURRENT USE**

Federal health policymaking  
Internal quality improvement  
National reporting

### **Application of Measure in its Current Use**

#### **CARE SETTING**

Hospitals

**PROFESSIONALS RESPONSIBLE FOR HEALTH CARE**

Physicians

**LOWEST LEVEL OF HEALTH CARE DELIVERY ADDRESSED**

Regional

**TARGET POPULATION AGE**

Age 15 to 84 years

**TARGET POPULATION GENDER**

Female (only)

**STRATIFICATION BY VULNERABLE POPULATIONS**

Unspecified

**Characteristics of the Primary Clinical Component**

**INCIDENCE/PREVALENCE**

In Canada, outside Quebec, from 2004-2005 to 2006-2007 the risk adjusted rate of unplanned readmission following discharge for hysterectomy was 1.2%.

**EVIDENCE FOR INCIDENCE/PREVALENCE**

Canadian Institute for Health Information (CIHI). Health indicators 2008. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2008. 96 p.

**ASSOCIATION WITH VULNERABLE POPULATIONS**

Unspecified

**BURDEN OF ILLNESS**

Unspecified

**UTILIZATION**

Unspecified

**COSTS**

Unspecified

## Institute of Medicine National Healthcare Quality Report Categories

### IOM CARE NEED

Getting Better

### IOM DOMAIN

Effectiveness

## Data Collection for the Measure

### CASE FINDING

Users of care only

### DESCRIPTION OF CASE FINDING

Hysterectomy episodes in an 11-month period

### DENOMINATOR SAMPLING FRAME

Patients associated with provider

### DENOMINATOR INCLUSIONS/EXCLUSIONS

#### Inclusions

Total number of hysterectomy episodes in an 11-month period

Refer to the "Technical Note: Hysterectomy Readmission" document listed in the "Companion Documents" field, which describes the episode building and case selection.

#### Exclusions

- Patients with a diagnosis of trauma, cancer, or HIV
- Patients discharged as a death or self sign-out

### RELATIONSHIP OF DENOMINATOR TO NUMERATOR

All cases in the denominator are equally eligible to appear in the numerator

### DENOMINATOR (INDEX) EVENT

Institutionalization  
Therapeutic Intervention

### DENOMINATOR TIME WINDOW

Time window brackets index event

## **NUMERATOR INCLUSIONS/EXCLUSIONS**

### **Inclusions**

Number of hysterectomy episodes with a readmission\* for a given year

\*A case is counted as a readmission if it is for a relevant diagnosis and occurs within 7 or 28 days (depending on condition) after the index episode of care. An episode of care refers to all contiguous in-patient hospitalizations and same-day surgery visits.

Relevant diagnoses for assigning readmission cases:

- Acute posthemorrhagic anemia - 28 days
- Paralytic ileus - 28 days
- Cardiac complications during or resulting from a procedure - 28 days
- Respiratory complications resulting from a procedure - 28 days
- Postoperative infection - 28 days
- Urinary tract infection, site not specified - 7 days
- Retention of urine - 7 days

Refer to the "Technical Note: Hysterectomy Readmission" document listed in the "Companion Documents" field, which describes the episode building and case selection.

### **Exclusions**

Unspecified

## **MEASURE RESULTS UNDER CONTROL OF HEALTH CARE PROFESSIONALS, ORGANIZATIONS AND/OR POLICYMAKERS**

The measure results are somewhat or substantially under the control of the health care professionals, organizations and/or policymakers to whom the measure applies.

## **NUMERATOR TIME WINDOW**

Fixed time period

## **DATA SOURCE**

Administrative data

## **LEVEL OF DETERMINATION OF QUALITY**

Not Individual Case

## **OUTCOME TYPE**

Adverse Outcome

## **PRE-EXISTING INSTRUMENT USED**

Unspecified

## Computation of the Measure

### SCORING

Rate

### INTERPRETATION OF SCORE

Better quality is associated with a lower score

### ALLOWANCE FOR PATIENT FACTORS

Risk adjustment devised specifically for this measure/condition

### DESCRIPTION OF ALLOWANCE FOR PATIENT FACTORS

A logistic regression model is fitted with age as an independent variable. Coefficients derived from the logistic model are used to calculate the probability of readmission for each case (episode). The expected number of readmissions of a region is the sum of these case probabilities for that region. The risk adjusted readmission rate (RARR) is calculated by dividing the observed number of readmissions of each region by the expected number of readmissions of the region and multiplying by the Canadian average readmission rate. A 95 percent confidence interval for the RARR is also calculated and the method used to calculate confidence intervals is available upon request.

### STANDARD OF COMPARISON

External comparison at a point in time  
External comparison of time trends  
Internal time comparison

## Evaluation of Measure Properties

### EXTENT OF MEASURE TESTING

Unspecified

## Identifying Information

### ORIGINAL TITLE

Hysterectomy readmission rate.

### MEASURE COLLECTION

[Health Indicators 2008](#)

### DEVELOPER

Canadian Institute for Health Information

**FUNDING SOURCE(S)**

Canadian Government

**COMPOSITION OF THE GROUP THAT DEVELOPED THE MEASURE**

*Employees:* Canadian Institute for Health Information (CIHI) Health Indicators

**FINANCIAL DISCLOSURES/OTHER POTENTIAL CONFLICTS OF INTEREST**

None

**ADAPTATION**

Measure was adapted from another source.

**PARENT MEASURE**

Hysterectomy Readmission Rate [*The hospital report 99*. Health Care Performance Measurement Group, University of Toronto, Toronto, 1999.]

**RELEASE DATE**

2006 Jun

**REVISION DATE**

2008 May

**MEASURE STATUS**

This is the current release of the measure.

**SOURCE(S)**

Canadian Institute for Health Information (CIHI). Health indicators 2008: definitions, data sources and rationale. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2008 May. 39 p.

**MEASURE AVAILABILITY**

The individual measure, "Hysterectomy Readmission Rate," is published in "Health Indicators 2008: Definitions, Data Sources and Rationale." This document is available in Portable Document Format (PDF) from the [Canadian Institute for Health Information \(CIHI\) Web site](#).

For more information, contact CIHI at, 4110 Yonge Street, Suite 300, Toronto, Ontario, Canada, M2P 2B7; Phone: 416-481-2002; Fax: 416-481-2950; E-mail: [indicators@cihi.ca](mailto:indicators@cihi.ca); Web site: <http://www.cihi.ca/cihiweb/>.

## **COMPANION DOCUMENTS**

The following is available:

- Canadian Institute for Health Information (CIHI). Health indicators 2008. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2008. 93 p. This document is available in Portable Document Format (PDF) from the [Canadian Institute for Health Information \(CIHI\) Web site](#).
- Canadian Institute for Health Information (CIHI). ICD-9/CCP, ICD-9-CM and ICD-10-CA/CCI codes for health indicators 2008. Ottawa (ON): Canadian Institute for Health Information (CIHI); 2008. various p. This document is available from the [CIHI Web site](#).
- Canadian Institute for Health Information (CIHI). Technical note: hysterectomy readmission. [internet]. Ottawa (ON): Canadian Institute for Health Information (CIHI); [accessed 2008 Aug 15]. [2 p]. This document is available from the [CIHI Web site](#).

## **NQMC STATUS**

This NQMC summary was completed by ECRI Institute on October 10, 2008. The information was verified by the measure developer on December 18, 2008.

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